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BIOACTIVE CONSTITUENTS FROM THE LEAVES OF *MELASTOMA MALABATHRICUM* L.

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ABSTRACT

Phytochemical and bioactivity studies of the leaves of *Melastoma malabathricum* L. (Melastomataceae) have been investigated. The *n*-hexane extract yielded □-amyrin, patriscabatrine and auranamide, ethyl acetate extract gave quercetin and quercitrin, and methanol extract gave quercitrin and kaempferol-3-*O*-(2",6"-di-*O*-*p*-*trans*-coumaroyl)glucoside. The crude extracts and isolated compounds were screened for their antioxidant and cytotoxic activities. The antioxidant assay was carried out by FTC and DPPH radical scavenging method. Kaempferol-3-*O*-(2",6"-di-*O*-*p*-*trans*-coumaroyl)-glucoside, quercetin and quercitrin showed strong activities with inhibition more than 90% in the FTC method. Quercetin was found to be the most active as radical scavenger in DPPH method with IC_{50} of 0.69 □M. □-Amyrin and kaempferol-3-*O*-(2",6"-di-*O*-*p*-*trans*-coumaroyl)glucoside demonstrated the strongest activities in the anti-inflammatory assay of TPA mouse ear oedema with IC_{50} of 0.11 and 0.34 mM/ear, respectively.

Keywords: Antiinflammatory, Antioxidant, Flavonoids, Melastomataceae, Melastoma malabathricum, Terpenoid